U.S. Application No. 10/774,437 Docket No. 0465-1141P

Reply filed January 20, 2006

Art Unit: 2655

Page 2 of 19

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (ORIGINAL) A method for formatting an optical recording medium,

said optical recording medium including a spare area for replacing a defective

unit with an available replacement unit, and a defect management area

including defect management information for managing a defective area and

location information indicating a position of the spare area, the method

comprising:

(a) resetting the location information of the spare area in response to a

formatting request to indicate at least that there is no spare area assigned; and

(b) formatting the optical recording medium in response to the formatting

request at least to use the spare area as a user data area after formatting.

2. (ORIGINAL) The method of claim 1, further comprising:

determining if a spare area has been assigned prior to said resetting step

(a) and said formatting step (b), wherein said steps (a) and (b) are performed if a

spare area has been assigned.

Docket No. 0465-1141P

Reply filed January 20, 2006

Art Unit: 2655

Page 3 of 19

3. (ORIGINAL) The method of claim 1, wherein said resetting step (a)

comprises converting the location information of the spare area to a

predetermined value.

4. (ORIGINAL) The method of claim 3, wherein the predetermined

value is a lowest possible address value.

5. (ORIGINAL) The method of claim 3, wherein the predetermined

value is a highest possible address value.

6. (ORIGINAL) The method of claim 3, wherein the predetermined

value is a specific preset code.

7. (ORIGINAL) The method of claim 1, wherein said formatting step

(b) includes registering sectors judged to have defects into a new PDL (primary

defect list), if the optical recording medium is to be formatted with certification.

8. (ORIGINAL) The method of claim 1, wherein said formatting step

(b) includes registering all sectors previously judged in an old SDL (secondary

Docket No. 0465-1141P

Reply filed January 20, 2006 Art Unit: 2655

Page 4 of 19

defect list) into a new PDL (primary defect list) if the optical recording medium

is to be formatted without certification.

9. (ORIGINAL) The method of claim 1, wherein the location

information of the spare area is stored in a secondary defect list of the defect

management area of the optical recording medium.

10. (ORIGINAL) The method of claim 9, wherein the location

information of the spare area includes start and end addresses of the spare

area on the optical recording medium.

11. (ORIGINAL) The method of claim 7, wherein said formatting step

(b) further includes disposing of an old SDL (secondary defect list) existing prior

to said formatting step (b), if the optical recording medium is to be formatted

with certification.

12. (ORIGINAL) The method of claim 1, wherein said formatting step

(b) reformats the optical recording medium by moving defective sectors

registered in a first list to a second list.

Docket No. 0465-1141P

Reply filed January 20, 2006

Art Unit: 2655

Page 5 of 19

13. (ORIGINAL) The method of claim 12, wherein the first list and

second list are, respectively, an SDL (secondary defect list) and a PDL (primary

defect list) for the optical recording medium.

14. (ORIGINAL) A method of formatting an optical recording medium,

said optical recording medium including a spare area for replacing a defective

unit with an available replacement unit, and a defect management area

including first information for managing a defective area and second

information indicating a size of the spare area, the method comprising:

(a) resetting the second information in response to a formatting request

to indicate at least that there is no spare area assigned; and

(b) formatting the optical recording medium in response to the formatting

request at least to use the spare area as a user data area after said formatting

step (b).

15. (ORIGINAL) The method of claim 14, further comprising:

determining if a supplementary spare area has been assigned prior to

said resetting step (a) and said formatting step (b), wherein said steps (a) and

(b) are performed if a supplementary spare area has been assigned.

Docket No. 0465-1141P

Reply filed January 20, 2006

Art Unit: 2655 Page 6 of 19

16. (ORIGINAL) The method of claim 14, wherein said resetting step (a)

comprises converting the second information of the supplementary spare area

to a predetermined value.

17. (ORIGINAL) The method of claim 16, wherein the predetermined

value is a lowest possible address value.

18. (ORIGINAL) The method of claim 14, wherein said formatting step

(b) includes registering sectors judged to have defects into a new PDL (primary

defect list) of the first information, if the optical recording medium is to be

formatted with certification.

19. (ORIGINAL) The method of claim 14, wherein said formatting step

(b) includes registering all sectors previously judged in an old SDL (secondary

defect list) of the first information into a new PDL (primary defect list) of the

first information if the optical recording medium is to be formatted without

certification.

20. (ORIGINAL) The method of claim 18, wherein said formatting step

(b) further includes disposing an old SDL (secondary defect list) of the first

Docket No. 0465-1141P Reply filed January 20, 2006

Art Unit: 2655

Page 7 of 19

information existing prior to said formatting step (b), if the optical recording

medium is to be formatted with certification.

21. (ORIGINAL) The method of claim 14, wherein said formatting step

(b) reformats the optical recording medium by moving defective sectors

registered in a first list to a second list in the first information in the defect

management area.

22. (ORIGINAL) The method of claim 14, wherein the spare area

includes a primary spare area and a supplementary spare area, and the second

information indicates the size of the supplementary spare area.

23. (ORIGINAL) The method of claim 22, wherein the second

information includes start and end addresses of the supplementary spare area.

24. (ORIGINAL) The method of claim 23, wherein the start address of

the supplementary spare area is reset to a predetermined value when said

formatting step (b) occurs.

Docket No. 0465-1141P

Reply filed January 20, 2006

Art Unit: 2655 Page 8 of 19

25. (CURRENTLY AMENDED) A method of formatting an optical

recording medium, said optical recording medium including a primary spare

area, a supplementary spare area for replacing a defective unit with an

available replacement unit, and a defect management area including defect

management information for managing a defective area, the defect

management information including first information to indicate a position of

the defective area and second information to indicate a size of the

supplementary spare area, the method comprising:

(a) receiving a formatting request to format the optical recording medium;

and

(b) formatting the optical recording medium in response to the formatting

request which allows use of the supplementary spare area as a user data area

after formatting,

wherein if the supplementary spare area was assigned before said

formatting step (b), the method further comprising registering position

information of a defective area included in the supplementary spare area into

the first information of the defect management information, and resetting the

second information indicating the size of the supplementary spare area

including indicating that there is no supplementary spare area assigned.

Docket No. 0465-1141P

Reply filed January 20, 2006 Art Unit: 2655

Page 9 of 19

26. (CURRENTLY AMENDED) The method of claim 25, wherein said

step (b) is performed only when a-the supplementary spare area has been

assigned.

27. (ORIGINAL) The method of claim 25, wherein the first information

includes a PDL (primary defect list) and a SDL (secondary defect list).

28. (ORIGINAL) The method of claim 25, wherein the supplementary

spare area is extended from a fixed location close to a lead-out area to a

variable inner location of the optical recording medium.

29. (ORIGINAL) The method of claim 25, wherein the second

information includes start and end addresses of the supplementary spare area

on the optical recording medium.

30. (ORIGINAL) The method of claim 29, wherein the start address of

the supplementary spare area is reset to a predetermined value when said

formatting step (b) occurs.

Docket No. 0465-1141P

Reply filed January 20, 2006

Art Unit: 2655

Page 10 of 19

31. (ORIGINAL) The method of claim 25, wherein the second

information is reset to a preset code or a value 00h or FFh to indicate that

there is no supplementary spare area assigned when said formatting step (b)

occurs.

32. (ORIGINAL) A recording medium comprising:

a spare area for replacing a defective area found during a formatting of

the recording medium or at least after formatting, with an available

replacement area; and

a defect management area including defect management information for

managing a defective area, the defect management information including first

information to indicate a defective unit found, and second information to

indicate a size of the spare area,

wherein the spare area is changed to a usable user area when formatting,

while the second information is reset to indicate that there is no longer a spare

area assigned.

33. (ORIGINAL) The recording medium of claim 32, wherein the

recording medium is a DVD-RAM.

Docket No. 0465-1141P

Reply filed January 20, 2006

Art Unit: 2655 Page 11 of 19

34. (ORIGINAL) The recording medium of claim 33, wherein the first

information corresponds to a PDL (primary defect list) and the second

information corresponds to a SDL (secondary defect list).

35. (ORIGINAL) The recording medium of claim 34, wherein a location

of a defective unit listed in the SDL is moved to the PDL.

36. (ORIGINAL) The recording medium of claim 32, wherein the spare

area includes a primary spare area and supplementary spare area, and the

second information includes size information for the supplementary spare area.

37. (ORIGINAL) The recording medium of claim 36, wherein the

supplementary spare area is extended from a fixed location close to a lead-out

area to a variable inner location of the recording medium.

38. (ORIGINAL) The recording medium of claim 37, wherein the second

information includes start and end addresses of the supplementary spare area.

U.S. Application No. 10/774,437 Docket No. 0465-1141P Reply filed January 20, 2006 Art Unit: 2655 Page 12 of 19

- 39. (CURRENTLY AMENDED) The recording medium of claim 38, wherein the start address of the supplementary spare area is reset to a predetermined value when said formatting step (b) occurs.
- 40. (CURRENTLY AMENDED) The recording medium of claim 36, wherein the second information is reset to a preset code of or a value 00h or FFh to indicate that there is no supplementary spare area assigned when said formatting step (b) occurs.